

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MASSACHUSETTS

ARISE FOR SOCIAL JUSTICE; ¿OISTE?;
NEW ENGLAND STATE-AREA
CONFERENCE OF THE NAACP; REV.
TALBERT W. SWAN, II; GUMERSINDO
GOMEZ; FRANK BUNTIN; RAFAEL
RODRIQUEZ; and DIANA NURSE,

Plaintiffs,

v.

CITY OF SPRINGFIELD and SPRINGFIELD
ELECTION COMMISSION,

Defendants.

Civil Action No. 05-30080 MAP

TRIAL AFFIDAVIT OF JOHN E. HARMON

I, John E. Harmon, hereby submit the following trial testimony:

1. I have been retained as an expert by counsel for Plaintiffs in the above-captioned litigation to render an expert opinion regarding:

A. The nine districts Plaintiffs have proposed as a replacement for Springfield's existing at-large election system for the City Council. Specifically, I was retained to analyze the Census data and methodology upon which Plaintiffs' proposed plan is based and to render an opinion as to whether minority groups in the proposed districts are sufficiently large and geographically compact to form a majority so as to provide the Plaintiffs with a greater opportunity to elect representatives of their choice. I was also asked to reaggregate voting data from the 2003 Springfield City Council to determine what the results would have been had the election been

conducted under a single member district system that is similar to the Plaintiffs' proposed plan.

- B. The two district plans the Plaintiffs have proposed as a replacement for Springfield's existing at-large election system for the School Committee.

Specifically I was retained to analyze the census data and methodology on which Plaintiff's plans are based and to render an opinion as to whether the proposed districts result in majority/minority voting age populations sufficient to provide the Plaintiffs with a greater opportunity to elect representatives of their choice.

2. I am being compensated at the rate of \$60/hour for my work on this case.
3. I prepared reports, was deposed and testified in two cases (United States District Court – District of Massachusetts *Magaly Camacho et al. v. William Francis Galvin* and *Black Political Task Force, et al. v. Galvin, et al.*) and submitted expert testimony in a third (District of Rhode Island – *Metts v. Murphy, C.A. No. 02-204T*).

Professional Qualifications

4. I am a full professor of geography at Central Connecticut State University. I hold a masters' degree in geography from the University of Cincinnati and a Ph.D. in geography from Boston University. I have twenty years' experience in Geographic Information Systems (GIS) as applied to municipal planning and census information. GIS, broadly speaking, is mapping software that allows you to do spatial analysis of many kinds of databases, including census databases and is commonly used to define voting districts. I teach introductory and advanced courses in GIS and supervise graduate thesis and special project work in GIS and place interns in state and local government agencies that use GIS. My *curriculum vitae* is attached as Appendix

A. My publications have been largely in the area of cultural geography but I have used GIS and computer mapping heavily in my research. This includes extensive use of census data in computer mapping. I have a book published on the design and implementation of GIS.

5. I have acted as a consultant on redistricting to the National Association for the Advancement of Colored People (Connecticut Chapter) and the Ocean State Action Coalition (Rhode Island). For the NAACP I prepared statewide house and senate redistricting plans that were presented to the Connecticut redistricting commission during the redistricting process following the 2000 Census. For the Ocean State Action Coalition in Rhode Island I did an analysis of 2000 Census data and trained their staff and volunteers in how to use mapping software to prepare a Congressional redistricting plan. I have also advised the Connecticut Citizen Action Group with respect to redistricting issues and have carried out other GIS projects for CCAG.

I. PLAINTIFFS' NINE DISTRICT CITY COUNCIL PLAN

Opinions

6. I have reviewed the Plaintiffs' Plan containing nine City Council districts and have reached the following opinions:

- A. These districts are supported by data from the Federal Census of Population and Housing (2000), and comprise a set of nine districts that are compact and meet the Constitutional requirements of one-person, one-vote as they are within the $\pm 5\%$ deviation from ideal population.
- B. Upon visual inspection, there are no problems of shape with the districts proposed.

- C. Blacks and Latino/Hispanics constitute the majority voting age population in four districts. The Plaintiffs' Plan has one majority Black City Council district (District 3), two majority Latino/Hispanic districts (Districts 1 and 2) and one additional majority Black/Latino/Hispanic district (4). These districts form a contiguous cluster in central Springfield.
- D. Adoption of the Plaintiffs' Plan, with its four majority-minority districts, would create a significant opportunity to elect more Black and Hispanic/Latino candidates to Springfield's City Council.

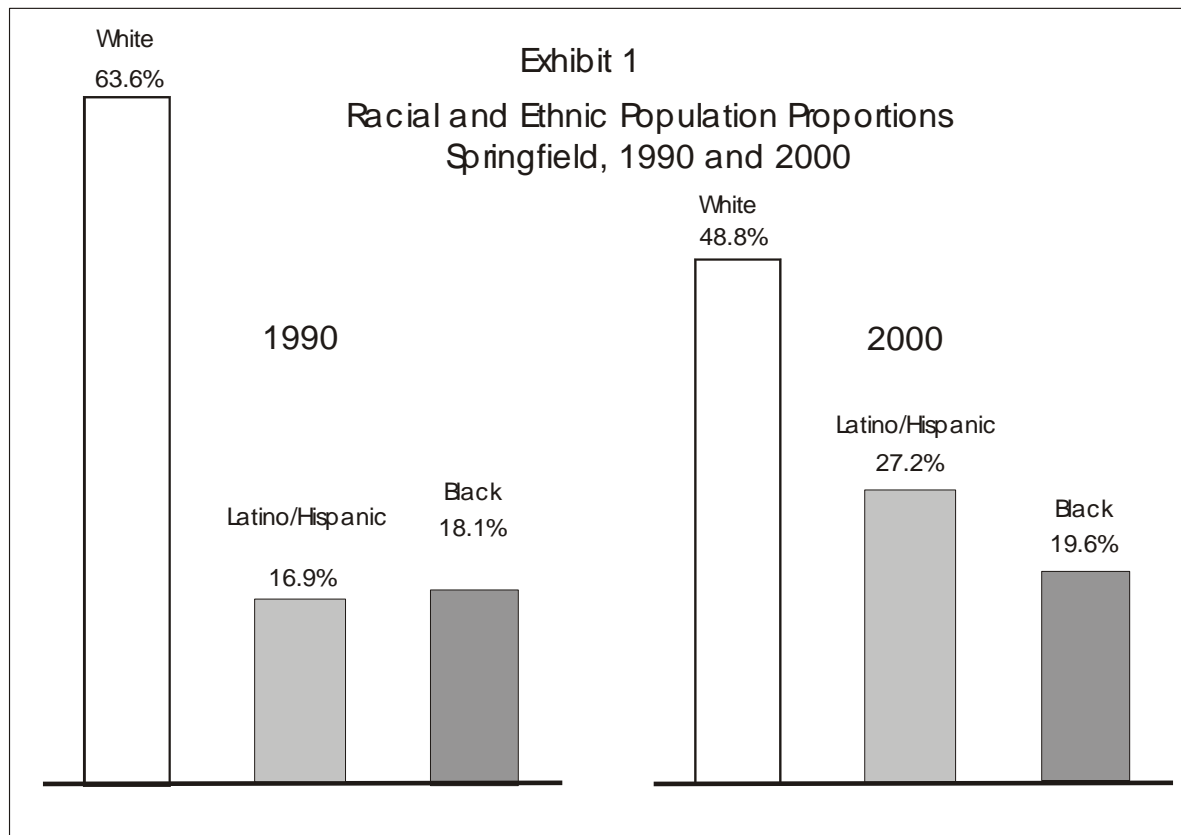
Basis and Reasons for Opinions

SPRINGFIELD – DEMOGRAPHIC CHANGE 1990-2000

7. The City of Springfield lost population in the decade from 156,983 to 152,082, 3.12 % of the population. Most of the decline was in the white population, which went from 99,869 to 74,291, a decline of 25.61%. In 1990 whites made up 63.62% of the city's population; by 2000 this proportion had dropped to less than half, 48.85%.

8. At the same time the Latino/Hispanic population grew very rapidly, from 26,528 to 41,343, growth of 55.85%. This growth rate was more rapid than the Latino/Hispanic growth in the state (49.1%) and has made Springfield the third largest Latino/Hispanic population center in the state, after Boston and Lawrence.

9. The Black population of the city grew much more slowly, from 28,484 in 1990 to 29,831 in 2000 (4.73%). The proportion of the Black population also grew slightly from 18.1% in 1990 to 19.6% in 2000 (Jones 2003). These demographic changes are shown in Exhibit 1.



Source: Jones 2003

10. With respect to national origin, a very large majority (85.26%) of Springfield's Latino/Hispanic population is from Puerto Rico and therefore U.S. citizens. The next largest proportion, and largest growing group over the decade is "Other." This category includes people whose country or continent response cannot be identified, was left blank or used an inclusive term such as "Latino." (Exhibit 2)

Exhibit 2					
	1990 (a)		2000		Percent Growth
	Population	Percent	Population	Percent	
Latino or Hispanic	25,642		41,343		61.20%
Puerto Rican	23,396	91.20%	35,251	85.30%	50.70%
“Other” (b)	887	3.50%	3,347	8.10%	277.30%
Mexican	249	1.00%	630	1.50%	153.00%
Dominican Republic	383	1.50%	614	1.50%	60.30%
Spanish (c)	(c)	(c)	372	0.90%	(c)

- a) In 1990, specific nationalities are based on sample data, so population figures will not match the 100% data.
- b) More detail is available in 2000, therefore the “Other” category may not be equivalent across time.
- c) Spanish was part of “Other” in 1990; no growth figures are available.

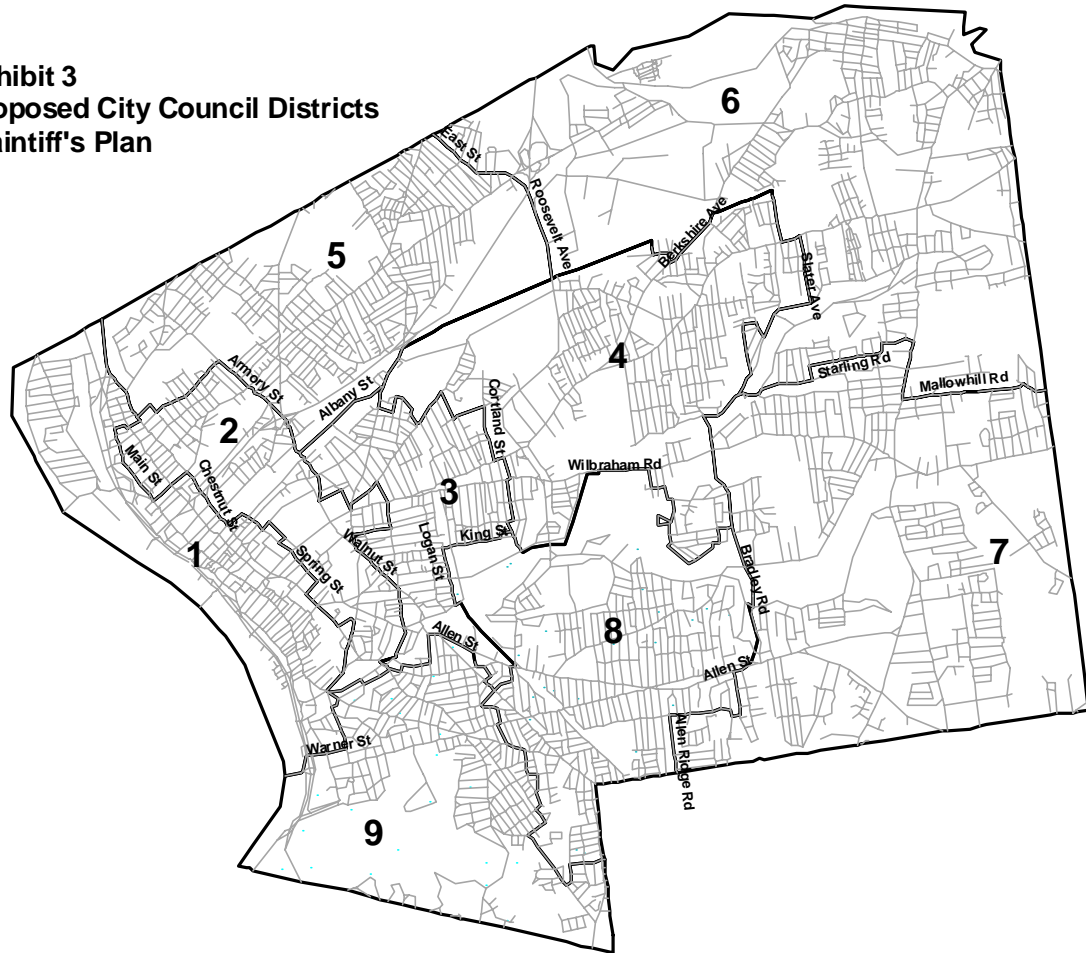
Source: Jones 2002

11. The rapid growth over the last decade of the Latino/Hispanic population of Springfield has changed the demographic makeup of the city in important ways. More than one in four city residents is Latino/Hispanic and because of the relatively young age of this group, even with no continued migration, it can be expected to grow in the future both absolutely and as a proportion of population.

PROPOSED CITY COUNCIL DISTRICTS

12. Acceptable City Council districts can be drawn using the 2000 census data. The districts in the Plaintiffs’ Plan are compact and meet the Constitutional requirement of one-person, one-vote as they are within the $\pm 5\%$ deviation from ideal population. The Plaintiffs’ Plan is shown in Exhibit 3.

Exhibit 3
Proposed City Council Districts
Plaintiff's Plan



13. The nine districts of the Plaintiffs' Plan have deviations from ideal population within $\pm 5\%$. Deviation from ideal is calculated by calculating the ideal population (Total City population/number of proposed districts, $152,082/9 = 16,898$) and subtracting the ideal population from the proposed population of the district. Proposed District 7 is closest to ideal (78) and District 4 the furthest (765). These districts are acceptable because they all are within $\pm 5\%$ of ideal population. This target of $\pm 5\%$ has become the accepted level of variation for state assembly districts after a long string of Supreme Court cases. In municipal districts more variation is usually allowed. The districts proposed in the Plaintiffs' Plan fall within the stricter

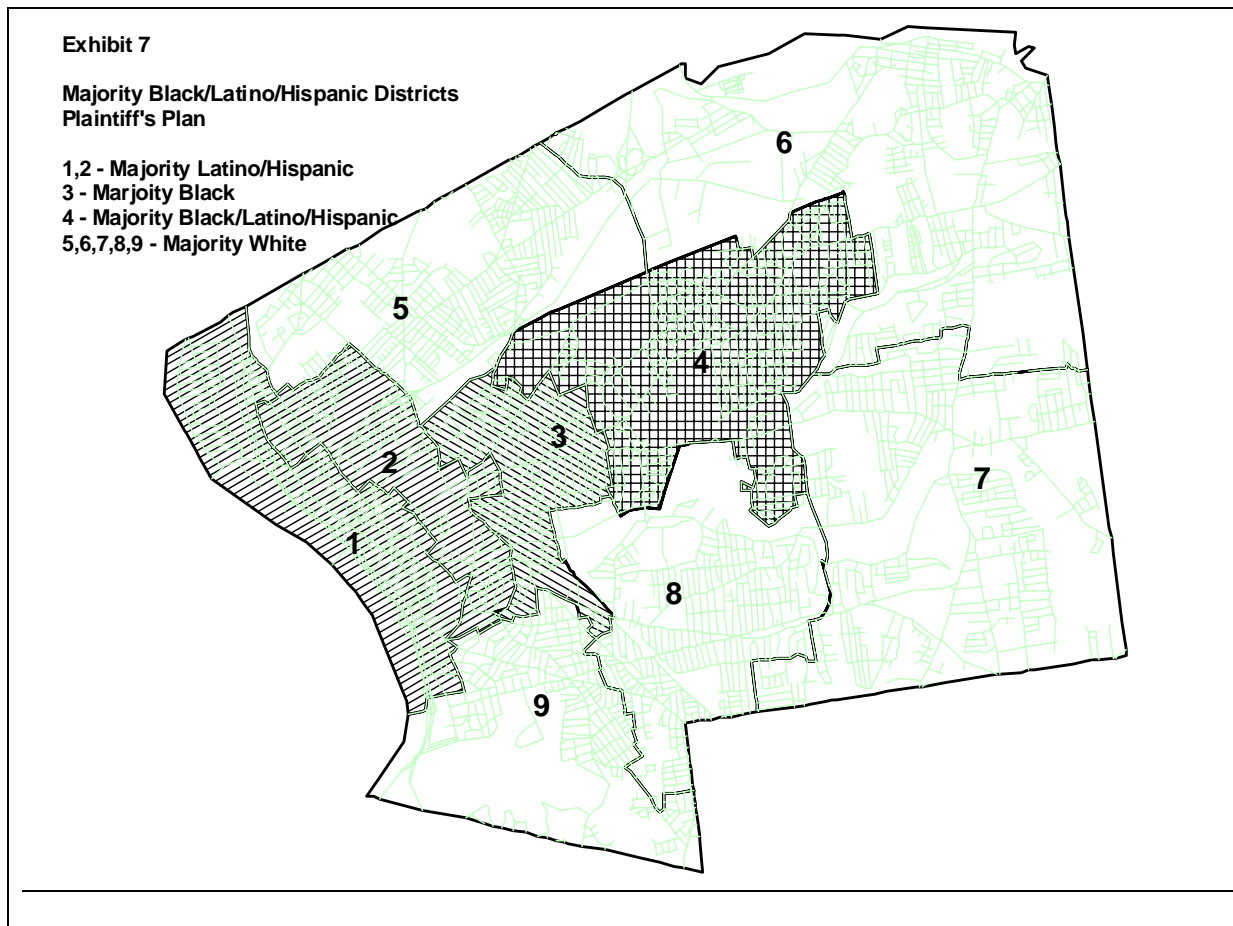
standard for state assembly districts. (Exhibit 4).

Exhibit 4									
DISTRICT	Total	Absolute Deviation from Ideal	Percentage Deviation from Ideal	White	Black	Asian	Native Amer/Pac. Island	Latino/Hispanic	Other
1	16,537	-361	-2.14%	3,669	2,088	180	41	10,249	310
2	16,560	-338	-2.00%	3,036	2,990	128	39	10,038	329
3	16,184	-714	-4.23%	2,060	9,139	199	61	4,218	507
4	16,133	-765	-4.53%	5,784	6,335	234	41	3,287	452
5	17,250	352	2.08%	11,155	1,399	194	40	4,127	335
6	17,550	652	3.86%	11,595	2,483	185	55	2,821	411
7	16,976	78	0.46%	13,401	1,831	252	29	1,191	272
8	17,352	454	2.69%	13,930	1,322	465	24	1,295	316
9	17,540	642	3.80%	9,661	2,244	1,020	48	4,117	450
Total	152,082			74,291	29,831	2,857	378	41,343	3,382
Ideal District	16,898								

14. In terms of voting age population (VAP) city-wide, Latino/Hispanics made up 21.78% and Blacks, 18.09% in 2000. Combined, the two groups accounted for 39.87% of the voting age population of the city. In the Plaintiffs' Plan, four of the proposed districts are either majority Latino/Hispanic, majority Black or majority Black/Latino/Hispanic. Proposed Districts 1 and 2 are majority Latino/Hispanic, District 3 is majority Black and District 4 is majority Black/Latino/Hispanic. The absolute VAP figures are shown in Exhibit 5 and the percentage VAP figures in Exhibit 6. The majority districts mentioned above are shown in bold in Exhibit 6 and in mapped form in Exhibit 7.

Exhibit 5							
DISTRICT	Total VAP	White VAP	Black VAP	Asian VAP	Native Amer/Pac. Island VAP	Latino/Hispanic VAP	Other VAP
1	11,394	3,328	1,532	137	26	6,155	216
2	10,722	2,659	1,941	95	26	5,805	196
3	10,441	1,674	6,058	144	46	2,210	309
4	10,985	4,516	4,226	161	32	1,804	246
5	12,763	9,092	872	143	30	2,439	187
6	12,746	9,364	1,541	138	37	1,458	208
7	13,006	10,807	1,186	182	21	667	143
8	13,576	11,403	882	342	19	763	167
9	12,422	7,894	1,314	697	38	2,229	250
Total	108,055	60,737	19,552	2,039	275	23,530	1,922

Exhibit 6				
DISTRICT	Percent White VAP	Percent Black VAP	Percent Latino/Hispanic VAP	Percent Black + Latino/Hispanic VAP
1	29.21%	13.45%	54.02%	67.47%
2	24.80%	18.10%	54.14%	72.24%
3	16.03%	58.02%	21.17%	79.19%
4	41.11%	38.47%	16.42%	54.89%
5	71.24%	6.83%	19.11%	25.94%
6	73.47%	12.09%	11.44%	23.53%
7	83.09%	9.12%	5.13%	14.25%
8	83.99%	6.50%	5.62%	12.12%
9	63.55%	10.58%	17.94%	28.52%
VAP %	56.21%	18.09%	21.78%	39.87%



15. **References**

Jones, Charles. 2002. "Census Shows Growing, Changing, Latino Population." Boston, MA:

The Mauricio Gaston Institute for Latino Community Development and Public Policy.

[<http://www.gaston.umb.edu/publications/gr/8xxnl/articles/Census.html>]

_____. 2003. "Latinos in Springfield." Boston, MA: The Mauricio Gaston Institute for

Latino Community Development and Public Policy.

[<http://www.gaston.umb.edu/resactiv/census/springfield.pdf>]

Methodology Used, and Data and Other Information Considered, In Forming Opinions

16. This analysis uses population data reported from the Federal Census of Population and Housing (2000). Data were taken from the PL 94-171 data release available on the World Wide Web at http://www2.census.gov/census_2000/datasets/redistricting_file--pi_94-171/. Data for Census block total and VAP populations came from tables P4 (Hispanic or Latino and Not Hispanic or Latino by Race [73] Universe: Total Population) and P6 (Hispanic or Latino and Not Hispanic or Latino by Race for the Population 18 Years and Over [73] Universe: Total Population 18 Years and Over). The construction of the Plaintiffs' Plan was done by MassVote using a GIS with additional redistricting tools (ArcView 3.3). I am familiar with the process and software used by MassVote and in my opinion they used the program correctly.

17. The districts were assembled using Census blocks, the finest level of geographic detail available. This data was obtained by MassVote which provided them to me. I have checked the data for completeness and accuracy and I believe it to be complete and accurate.

18. The proposed City Council districts were assembled using GIS by combining Census blocks and calculating the total and voting age populations of the assembled districts. Absolute and percentage deviations were calculated using an ideal population (total city population divided by the number of districts, $152,082/9 = 16,898$).

19. Because the 2000 Census of Population and Housing allowed for the first time a respondent to choose multiple responses to questions of race, there is a question of how to define Black population. In this affidavit I cite Black population as single race, non-Hispanic Blacks. This is a conservative estimate of Black population; the US Department of Justice, for example, describes Black population as including non-Hispanic respondents who report more than one race, one of which is Black. In this affidavit, Latino/Hispanic population includes all

respondents who indicated they were Hispanic or Latino. Using these two definitions of Black and Latino/Hispanic, there is no double-counting between the two groups so combinations of totals are not inflated.

A. REAGGREGATION OF VOTING DATA FROM 2003 SPRINGFIELD CITY COUNCIL ELECTION

20. Plaintiffs' proposed districts are based on Census block data from the 2000 Census. However, voting data from the 2003 election is only available at the precinct level, not at the Census block level. I was asked to perform a reaggregation of the voting data using nine precinct-based districts that approximated the Plaintiffs' nine Census block-based districts.

21. The precinct-based districts are similar to the Plaintiffs' proposed districts in several respects. In the precinct-based plan, Blacks and Latino/Hispanics make up the majority of the voting age population in four of the districts. Similar to the Plaintiffs' proposed plan, the precinct plan has one majority Black City Council district (District 3), two majority Latino/Hispanic districts (Districts 1 and 2) and one additional majority Black/Latino/Hispanic district (District 4). The remaining districts (5-9) are majority white VAP. The precinct-based plan, like the Plaintiffs' Proposed Plan, also meets the Constitutional requirement of one-person, one-vote as all the districts are within +/- 5% of ideal district population.

22. Reaggregation of the 2003 at-large City Council election involved taking the election results by candidate and retabulating them as if the districts in the Plaintiffs' Precinct Plan had been in place. Under the at-large system voters cast ballots for nine places; only the first three places are reported here. Exhibit 8 contains the results of this reaggregation and shows a Latino/Hispanic candidate winning Districts 1 and 2 (majority Latino/Hispanic VAP) with 58.8% and 63.8% of first place votes, a Black candidate winning District 3 (majority Black

VAP) with 65.1% of the first place votes and Latino/Hispanic and Black candidates very competitive in District 4 (majority Black/Hispanic/Latino VAP) with 46.8% and 46.3% of the first and second place votes. Black and Latino/Hispanic candidates are shown in bold. (Exhibit 8):

Exhibit 8¹

DISTRICT	1st Place Candidate	Ballots Cast for 1st Place	Percent of Ballots Cast for 1st Place	2nd Place Candidate	Ballots Cast for 2nd Place	Percent of Ballots Cast for 2nd Place	3rd Place Candidate	Ballots Cast for 3rd Place	Percent of Ballots Cast for 3rd Place
1	Tosado (Latino)	1,729	58.8%	Foley (White)	1,230	41.9%	Cortes (Latino)	1,078	36.7%
2	Tosado (Latino)	936	63.8%	Foley (White)	602	41.1%	Williams (Black)	589	40.2%
3	Williams (Black)	1,435	65.1%	Lewis-Caulton (Black)	1,424	64.6%	Tosado (Latino)	1,060	48.1%
4	Tosado (Latino)	856	46.8%	Williams (Black)	846	46.3%	Sarno (White)	744	42.3%
5	Foley (White)	2,082	55.6%	Moriarty-Mazza (White)	1,993	53.3%	Rooke (White)	1,884	50.3%
6	Foley (White)	1,356	53.6%	Williams (Black)	1,282	50.3%	Walsh (White)	1,235	48.8%
7	Foley (White)	2,252	54.9%	Sarno (White)	2,216	54.1%	Kelly (White)	2,194	53.5%
8	Foley (White)	2,979	56.8%	Sarno (White)	2,918	55.7%	Puppolo (White)	2,833	54.1%
9	Sarno (White)	2,468	63.2%	Ryan (White)	2,030	51.9%	Foley (White)	2,011	51.5%

23. None of the nine candidates elected to City Council in 2003 lived in Districts 1, 2, 3 or 4, the majority-minority districts of the precinct plan. One would have been in District 5, two in District 7, 4 in District 8 and two in District 9, all majority white districts in the precinct plan.

¹ Note: Vote totals do not include Precinct 5-B. This precinct's VAP is 50.9% White, 32.2% Black, 14.3% Latino and 2.6% Other.

The at-large election of 2003 yielded one Latino/Hispanic (Tosado) and one Black (Williams) on the City Council. Had the election been conducted under the precinct plan, and by extension, the Plaintiffs' proposed plan, it would have created a significant opportunity to elect two Latino/Hispanics, one Black, and either a Latino/Hispanic or a Black candidate in District 4.

II. PLAINTIFFS' SIX DISTRICT SCHOOL COMMITTEE PLANS

METHODOLOGY

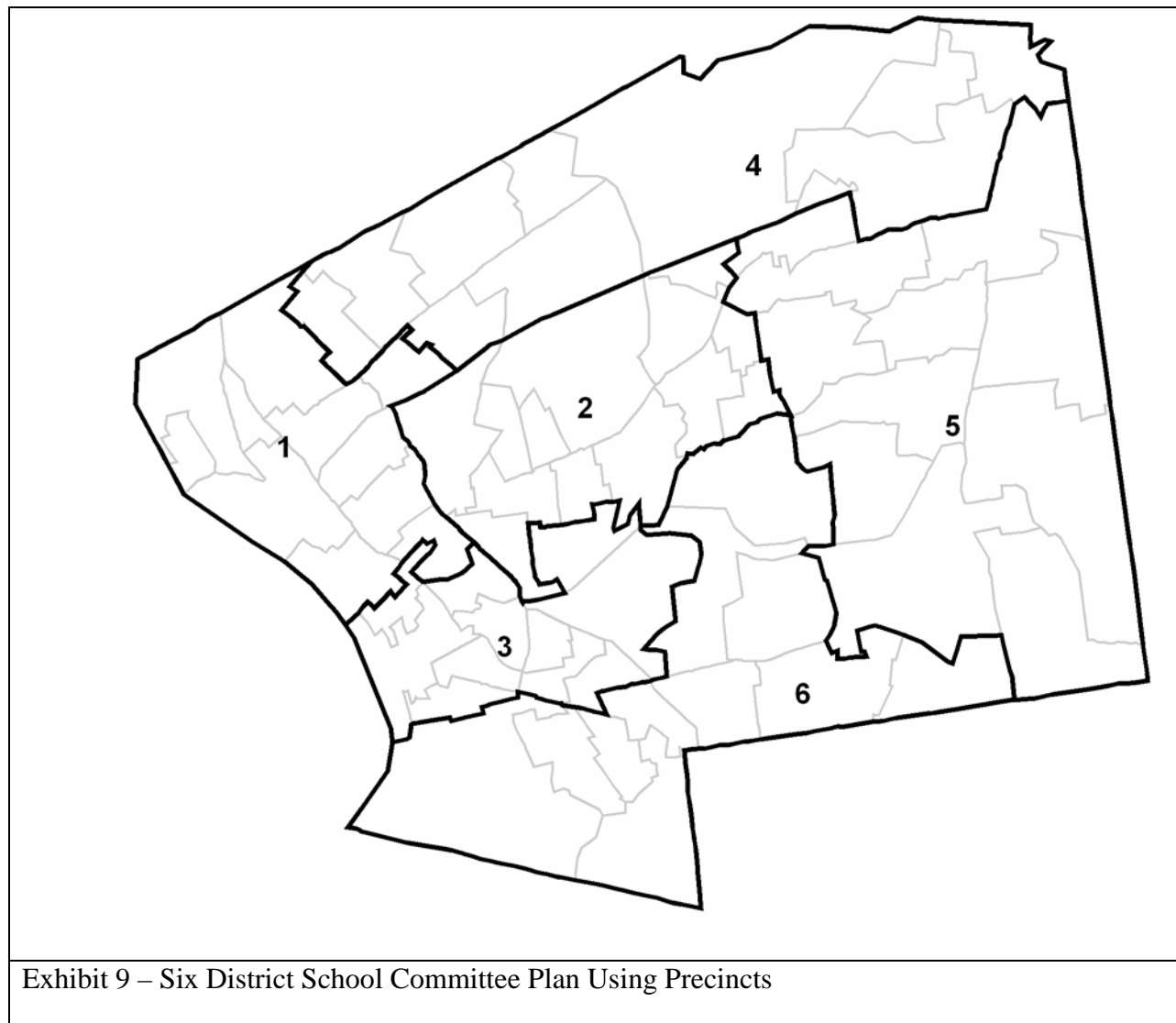
24. This analysis uses data gathered by the U.S. Bureau of the Census in March, 2000, for the Decennial Census of Population and Housing. The data came from the World Wide Web as part of a national data set provided by the Census under PL 94-171 for redistricting purposes [http://www2.census.gov/census_2000/datasets/redistricting_file--pl_94-171/]. This data set provided total and voting age population (VAP) data by Census block, the finest level of geographic detail available. These blocks were aggregated to districts using the current precincts and the base Census blocks. The development of the Plaintiffs' Plans reported in this affidavit was done by Mass Vote using a GIS with additional redistricting tools (ArcView 3.3). Mass Vote has supplied me with summary tables and maps of the Plaintiffs' proposed plans. I have checked the data for completeness and accuracy and believe them to be complete and accurate. I am familiar with the process used by Mass Vote and have used it myself on many occasions. Absolute and percentage deviations from ideal districts were calculated by dividing the total Springfield population by the number of districts: $152,082/6 = 25,347$. In my opinion, Mass Vote has used the tools effectively and appropriately.

25. The 2000 Census of Population and Housing was the first census that provided respondents the opportunity to select more than one race. This results in choices of how to

handle racial totals – do you use only those who report a single race or those who report that race in combination with other races. In this affidavit I report black population as single race, non-Hispanic blacks, sometime referred to as Black Alone population. This provides a conservative estimate of black population; the US Department of Justice, for example, represents black population as including non-Hispanic residents who report one or more race, one of which is black. I report Latino/Hispanic population to include all respondents who indicated they were Hispanic or Latino. Using these counts of black and Latino/Hispanic population I have avoided double-counting between the two groups so combined percentages are not inflated.

SIX DISTRICT SCHOOL COMMITTEE PLAN USING PRECINCTS

26. There are two possible “building blocks” to use when creating plans for Springfield – the precincts and Census blocks. The Plaintiffs present plans using both. Because the number of precincts, 64, is not evenly divisible by 6, the precinct plan necessarily splits a precinct. Precinct 8-H is split among three proposed districts (2,4 and 5). The remainder of the district boundaries coincide with precinct boundaries. Exhibit 9 is the map the proposed districts; the precinct boundaries show in gray.



27. Exhibit 10 shows the breakdown of total population and VAP by race and ethnicity across the six districts.

**Exhibit 10 - Voting Age
Population - Six District BOE
Plan Using Precincts**

District	Total	Absolute Deviation from Ideal	Percentage Deviation from Ideal	Voting Age Population	White VAP%	Black VAP%	Asian VAP%	Native Amer./ Pac. Islander VAP%	Latino/ Hispanic VAP%	Other VAP%
1	26,170	823	3.25%	17,953	31.33%	12.73%	1.13%	0.18%	53.05%	1.59%
2	24,696	-651	-2.57%	16,117	22.03%	53.29%	1.25%	0.38%	20.42%	2.64%
3	25,694	347	1.37%	17,728	48.32%	17.18%	4.21%	0.37%	27.61%	2.32%
4	24,184	-1,163	-4.59%	17,625	73.16%	7.23%	1.02%	0.27%	16.74%	1.57%
5	24,921	-426	-1.68%	18,869	76.08%	13.78%	1.14%	0.20%	7.35%	1.45%
6	26,417	1,070	4.22%	19,763	79.68%	8.90%	2.50%	0.16%	7.50%	1.26%
Total	152,082			108,055						
Ideal Population	25,347									

All districts fall within +- 5% of the ideal population. This target of +-5% from ideal has become the accepted level for state assembly districts after a long string of Supreme Court cases. In municipal electoral districts more variation is usually allowed but these districts presented in this plan conform to the more stringent state assembly standard.

The plan yields one black majority VAP district (District 2- 53.29%) and one majority Latino district (District 1 – 53.05%).

SIX DISTRICT SCHOOL COMMITTEE PLAN USING BLOCKS

28. The second possible “building block” is the Census block. This geographic unit is the smallest area for which total population and VAP is reported so it makes the Census block the most detailed “building block” for creating districts in cities. Exhibit 11 shows the Plaintiffs’ Six District Plan Using Blocks with the outlines of the blocks shown in gray.

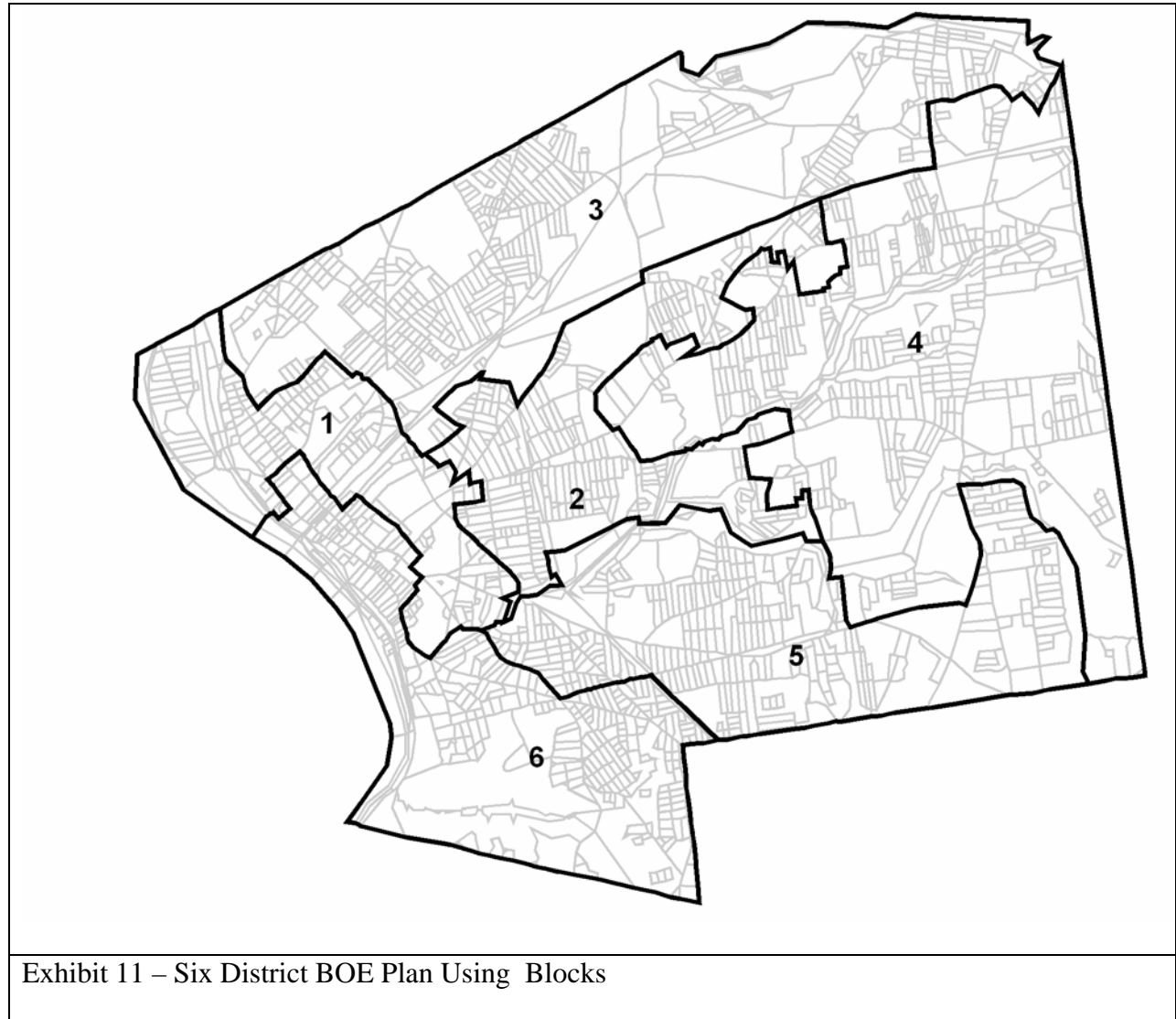


Exhibit 12 shows the breakdown of total population and racial and ethnic VAP percentages.

**Exhibit 12 - Voting Age
Population - Six District BOE
Plan Using Blocks**

District	Total	Absolute Deviation from Ideal	Percentage Deviation from Ideal	Voting Age Population	White VAP%	Black VAP%	Asian VAP%	Native Amer/ Pac. Islander VAP%	Latino/ Hispanic VAP%	Other VAP%
1	24,662	-685	-2.70%	15,761	21.77%	14.57%	0.70%	0.21%	61.16%	1.60%
2	24,517	-830	-3.27%	16,052	21.13%	55.08%	1.15%	0.40%	19.63%	2.61%
3	26,399	1,052	4.15%	19,184	71.79%	7.55%	0.99%	0.26%	17.91%	1.50%
4	25,356	9	0.04%	19,168	72.97%	15.92%	1.27%	0.23%	8.04%	1.57%
5	26,324	977	3.85%	19,494	75.33%	9.55%	3.48%	0.20%	9.79%	1.65%
6	24,824	-523	-2.06%	18,396	62.35%	11.16%	3.44%	0.24%	20.96%	1.85%
Total	152,082			108,055						
Ideal Populatio n	25,347									

The districts fall within +/- 5% of ideal population, satisfying the one person-one vote requirement and the plan also yields one majority Latino/Hispanic VAP district (District 1 – 61.16%) and one majority black VAP district (District 2 – 55.08%).

SUMMARY OF FINDINGS FOR SCHOOL COMMITTEE

29. Several conclusions about the Plaintiffs' Plans for districts for the School Committee can be drawn from these tables and figures:

- A. Both proposed plans meet the one person-one vote requirement for viable districts.

- B. Using voting age population, both plans produce one majority Latino/Hispanic district and one majority Black district.
- C. Upon visual inspection, there appear to be no problems of shape with the proposed districts in either plan.
- D. While either district plan proposed here would improve the possibilities of the election of Latino/Hispanic and black candidates to the Springfield Board of Education, the plan based on Census blocks is more effective for a Latino/Hispanic candidate.

III. RESPONSE TO DEFENDANTS ABOUT ELECTORAL OPPORTUNITIES

30. In paragraphs 230 and 247 of the Defendants' Issues of Fact (1/9/07), they write that the Plaintiffs' plan will provide for no more opportunities in City Council and School Committee elections than the current method of election has provided and will provide. I disagree.

31. In my opinion, changing to a ward election system with majority/minority districts would significantly increase the opportunity for minority representation on the City Council and School Committee. I base that opinion on the following:

- Reducing the geographic and population size of the electoral geography from the entire City to a single ward or district facilitates the face-to-face, direct contact between a minority candidate and potential voters. In my experience running campaigns in both a district and at-large electoral systems, a candidate can canvas an entire district during an election season while it is just not possible to reach the same proportion of potential voters in a much large at-large system. This face-to-face contact between candidate and voter results in a relationship very likely to increase

the probability that the voter will vote. In a recent study of a 2001 election in Boynton Beach, Florida a face-to-face mobilization effort increased turnout by five percentage points.²

- Dr. Amy, in his affidavit, documented the role of minority organizations in increasing turnout. It is easier to organize within smaller districts than city-wide, and minority organizations, especially if located in majority/minority districts, would be in a better position to focus on local issues and assist minority candidates.
- Districts also reduce the amount of voter contact by mail that a candidate must do and, given that Blacks and Latinos in Springfield have lower median family incomes than whites, reducing these costs of campaigning would have a greater impact on Blacks and Latinos running for City Council or School Committee.

32. The advantages I cite above to districts would apply to any candidate, but because of the evidence for racially polarized voting (cited by Engstrom) and assuming lower turnout in Hispanic and Black communities (as does Amy), they would be felt more strongly for a Black or Latino candidate in a majority/minority VAP district than for a white in a majority white district.

IV. RESPONSE TO DEFENDANTS CONCERNING DISTRICTING PRINCIPLES

33. In paragraph 219 of the Defendants' Issues of Fact (1/9/07), they write that the Plaintiffs' nine district City Council plan subordinated the City's "traditional districting principles" to race. Defendants ignore that the Plaintiffs' plan also takes into account shape, compactness and adherence to one person, one vote. I considered all these factors in assessing the plan.

² David Niven, "The Mobilization Solution? Face-to-Face Contact in a Municipal Election," *Journal of Politics* vol. 66(3), 2004, pp. 868-884.

USE OF NEIGHBORHOODS AS A DISTRICTING PRINCIPLE

34. The Defendants also report that the boundaries of neighborhoods were not considered in the construction of the Plaintiffs' plans. It would have been a mistake, however, to attempt to base the Plaintiffs' plan on the location of Springfield's neighborhoods. Unlike voting districts, neighborhoods usually have indistinct boundaries and often overlap significantly. Often where a neighborhood starts or ends depends on whom you ask, where you ask and when you ask. A neighborhood threatened by an undesirable land use change may expand beyond its "normal" boundaries in reaction against the change. Also, unlike voting districts where residence determines district, individuals who do not live in a neighborhood may be very interested and concerned with conditions there. Indeed, at least one of the neighborhood councils (Forest Park Civic Association) will accept members from any location [http://www.forestparkca.com/join_the_fpca_today.htm]. The community of interest of a neighborhood may extend well beyond whatever boundaries the neighborhood might be thought to have. This is particularly true of any business that is a major employer in a neighborhood or depends on residents of the neighborhood for its livelihood.

35. Even if you delimit neighborhoods on a map, a second important issue is whose neighborhoods will you accept as important. Exhibit 13 is a table of neighborhood councils and associations from four different sources.

Exhibit 13

A. Office of Community Development City of Springfield	B. City of Springfield Police Department	C. City Planning/Election Commissions	D. Forest Park Association "Neighborhood Councils and Civic Associations"
Bay Area Neighborhood Council		Bay	
Hungry Hill Neighborhood	Hungry Hill Neighborhood		
Indian Orchard Citizens Council	Indian Orchard Citizens Council	Indian Orchard	
Maple-High/Six Corners	Maple High/Six Corners	Six Corners	
McKnight Neighborhood Council		McKnight	
New North Citizens Council			
Old Hill Neighborhood Council		Old Hill	
Pine Point Community Council		Pine Point	
South End Citizens Council		South End	
Upper Hill Residents Council	Upper Hill Neighborhood Council	Upper Hill	
East Springfield Neighborhood Council		East Springfield	
Chapin Terrace Association	Chapin Terrace Association		Chapin Terrace Civic Association
Forest Park Civic Association	Forest Park Civic Association	Forest Park	Forest Park Civic Association
Matoon Street Historic Preservation	Matoon Street Association		Matoon Street Historic Preservation
16 Acres Civic Association	Sixteen Acres Civic Association	Sixteen Acres	16 Acres Civic Association
Boston Road Civic Association		Boston Road	
		Brightwood	
Armory Quadrangle Civic Association	Armory Quadrangle Civic Association		Armory Quadrangle Civic Association
Atwater Park Civic Association	Atwater Park Civic Association		Atwater Park Civic Association
East Forest Park Civic Association	East Forest Park Civic Association	East Forest Park	East Forest Park Civic Association
LaBroad Civic Association	LaBroad Civic Association		LaBroad Civic Association
Outer Belt Civic Association			Outer Belt Civic Association
Lower Liberty Heights, Inc. Community Action Team		Liberty Heights	Lower Liberty Heights Community Action Team
Vietnamese/American Civic Association	Vietnamese/American Civic Association		Vietnamese/American Civic Association
		Memorial Square	
		Metro Center	

Sources:

A. Faxed list 8.11.05, from Office of Community Development of Springfield

B. <http://www.spfldpd.org/resources/localinfo/cityordinances/communityassoc.htm> Accessed 8.05

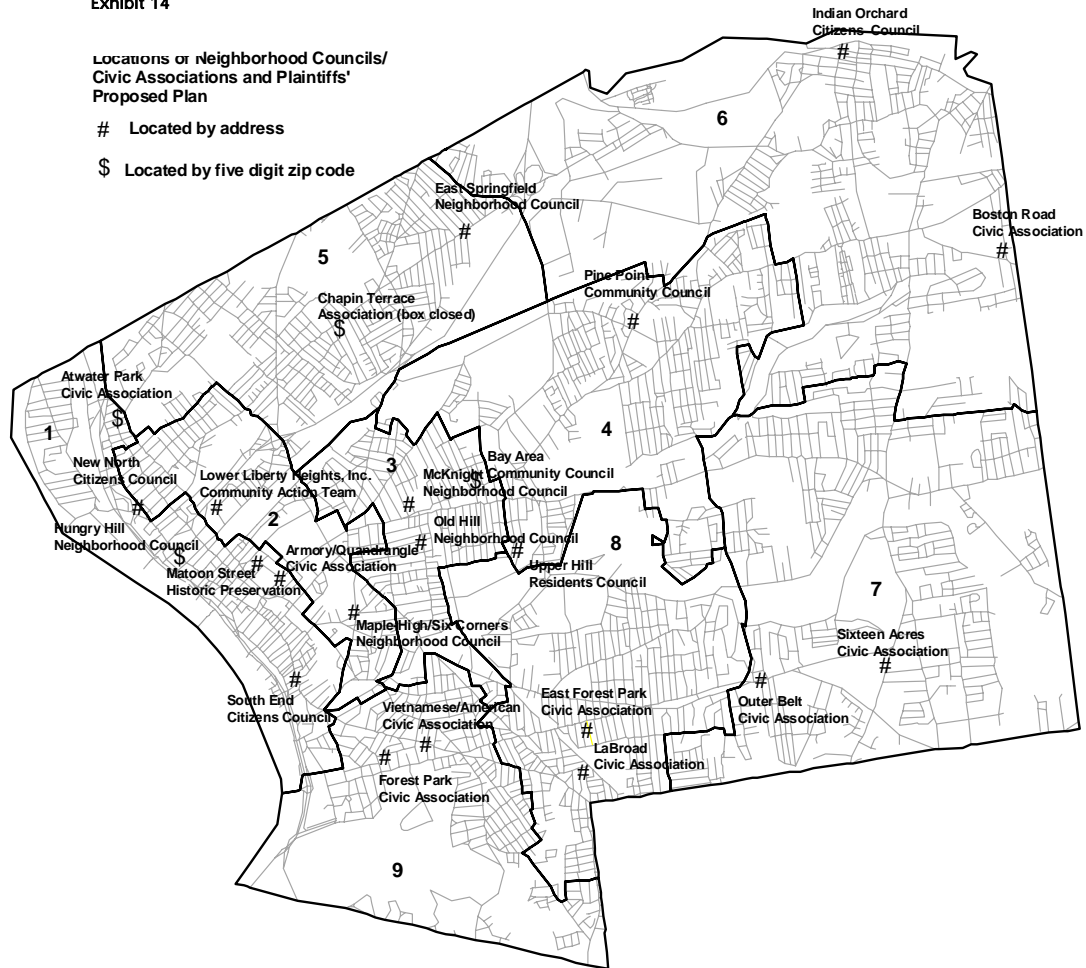
C. http://en.wikipedia.org/wiki/Springfield%2C_Massachusetts Accessed 1.17.07

D. <http://www.forestparkca.com/> Accessed 1.17.07

Of the twenty seven different neighborhood councils and civic associations listed, only two (16 Acres and Forest Park) appear on all four lists, 15 appear on 3 lists, 6 appear on 2 lists and 4 appear on only one list. Of the four that appear on only one list, two (Metro Center and Memorial Square) are in the list cited by the Defendants. There may be more than the 27 listed in the Exhibit. The web encyclopedia source stated, “Many of the neighborhoods are subdivided again according to landmarks or voting precincts. Some names are unofficial, but are used by area residents nonetheless. For example, the Hollywood section in the South End actually refers to a housing complex and Mason Square is the central intersection in the McKnight neighborhood.”

36. Nor are neighborhood boundaries at all clear. “Their exact boundaries are disputed by Census data, civic wards and precincts borders, zip codes, and the opinions of the city's citizens.” [http://en.wikipedia.org/wiki/Springfield%2C_Massachusetts. Indeed, given the contradictory locations of the contact points for the 23 councils and associations listed by the City of Springfield’s own Office of Community Development, the perceived boundaries boundaries of these neighborhoods (if they even actually exist) overlap and are very confusing, thus making them not a reliable basis on which to draw electoral districts. (Exhibit 14)

Exhibit 14



All of the proposed districts have at least one council or association located within them and in denser areas of the City with longer settlement histories there are several per district.

37. In addition to the fluidity of neighborhood boundaries there is the issue of governance and authority to delimit these neighborhoods if they are “sub-jurisdictions.” There has been also some recent controversy over the election processes to these councils with considerable variation among the councils [Hamel, C. “Council Election Study Set.” *Springfield Republican*. Aug. 5, 2005 <http://www.masslive.com/search/index.ssf?/base/news-0/1123228085226020.xml?nnse#continue>].

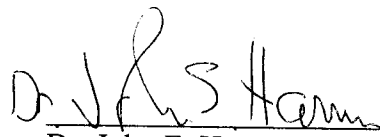
38. The Defendants claim that the division of the City into City Council districts will “result in the subordination of some neighborhoods to others and limit the number of councilmembers to whom their neighborhood councils can direct their requests.” *Memorandum Supporting Defendants’ Opposition to Plaintiffs’ Motion for a Preliminary Injunction* at 33. The division into districts would in no way restrict the number of council members to whom requests could be directed; if a neighborhood group has an issue that relates to any Council member, they will certainly make their appeals. Many neighborhood issues can have city-wide effect and local groups will attempt to influence any decision-maker that has a role. As to the subordination of some neighborhoods to others, that probably already occurs and is quite changeable as local conditions of growth and development affect neighborhoods in different ways. At some times the concerns of some neighborhoods get more attention than others. Finally, neighborhoods, however long established and important, are not the same type of districts as voting districts. A voting district has discrete boundaries, and all registered voters may vote in that district. Neighborhoods have more fluid boundaries and individuals and organizations outside the neighborhood often have significant interests and influence in the neighborhood. It certainly is desirable to include considerations of neighborhood boundaries into a redistricting process, but the inconsistency in boundaries and governing processes and the likelihood of change in the neighborhoods that is at least as rapid as changes in voting districts required by decennial censuses make this difficult.

USE OF PRECINCTS IN DISTRICTS PLANS

39. City Council and School Committee districts could be drawn using several different “building blocks,” pieces of varying size geography that can be aggregated to construct the districts. With respect to using existing voting precincts as building blocks for plans, all plans

presented by both Defendants and Plaintiffs cut at least one precinct. A strict adherence to not cutting precincts is not possible because of the facts that there are 9 City Council members, 6 School Committee members and 64 precincts. Plans produced from precincts as the building block will cut fewer precincts than plans drawn on census blocks, but it would be possible to draw a census block based plan that cut fewer precinct lines. There is nothing inappropriate about using census blocks in redistricting. Unlike neighborhoods, precincts do have distinct and agreed upon boundaries but precinct boundaries are not permanent; they will change with each decennial census. Census blocks are occasionally divided, added or removed but, being smaller, are less likely than precincts to change.

Signed under penalties of perjury, this 1st day of February, 2007.

A handwritten signature in black ink, appearing to read "Dr. John E. Harmon", written over a horizontal line.

Dr. John E. Harmon

APPENDIX A

Curriculum Vitae
John E. Harmon
Department of Geography
Central Connecticut State University

Personal History

Birthdate: May 15, 1947
Birthplace: Columbus, Ohio USA
Citizenship: US
Work Address: Department of Geography, Central Connecticut State University, New Britain, CT, 06050
Marital Status: Married, two children
Address: 16 White Ave., West Hartford, CT 06119
Telephone: (H) 860.232.9936 (W) 860.832.2789
E-mail: harmonj@ccsu.edu

Education

B.A.	University of Michigan, 1969	Russian Area Studies
M.A.	University of Cincinnati, 1974	Geography
Ph.D.	Boston University, 1979	Geography

Work Experience

Fall 1972 - Spring 1978	Various teaching assistantships and instructorships during graduate school.
Fall 1977 - Spring 1979	Visiting Assistant Professor, Miami University, Oxford, OH
Fall 1979 - Spring 1986	Assistant Professor, Department of Geography CCSU, New Britain, CT
Fall 1986 - Spring 1992	Associate Professor
Fall 1992 - present	Professor

GIS Courses

Geog 378 - Introduction to Geographic Information Systems
Geog 478 - GIS Design and Implementation
Geog 479 - Applications of GIS
Geog 579 - Internet GIS and Mapping

Recent GIS Project Experiences - Outreach and Consulting

Housing Quality Survey and Mapping: Neighborhood Housing Service, New Britain CT. Fall 2000 and ongoing.

Parcel Map Development - Connecticut Towns of Bridgewater, New Hartford, Warren, Valley RPA, Plymouth, Coventry, Wolcott, Plymouth

Mapping and GIS Database Support - New York Service Employees International State Council.

GIS Database Support for Planimetrics (private planning consultants) - Danbury, Bethel, Groton, and other communities

Address Matching and Districting. Maine People's Alliance, Connecticut Citizen Action Group.

Arcview Training - Ct. DEP, Town of South Windsor, Town of West Hartford, Legislative Electoral Action Project, City of Torrington, Land Trust Groups, Connecticut Association of Zoning Enforcement Officers

NAACP-Connecticut: Redistricting

Ocean State Action Coalition - Providence, RI - Redistricting Training

Connecticut Citizen Action Group - Redistricting and Membership Analysis

GIS and Mapping Support - Plan of Conservation and Development. Office of Policy and Management, State of Connecticut.

Publications

1974. "There Are No Arby's in Appalachia," *Clifton*. 1 (2): 1-15. With Richard Symanski and Michael Swift.
1976. *County Growth Atlas: The Spatial Dynamics of Postwar County Economic Growth*. First National Bank of Boston and New England Regional Research Program.
1983. "The Regional Structure of Megalopolis and the Situation of Southern New England Cities." *Proceedings of the New England-St. Lawrence Valley Geographical Society*. 13: 80-89.
1984. "New England as a Vernacular Culture Region." *Proceedings of the New England-St. Lawrence Valley Geographical Society*. 14: 37-45.
1984. "Ghetto Boundaries in Connecticut Cities." *Transition*. 14 (3): 16-24.
1986. *Connecticut: A Geography*. Boulder, CO: Westview Press. With Tom Lewis
1986. "Bowling Regions of North America." *Journal of Cultural Geography*. Summer: 109-124.
1988. *Geography in New England*. New Britain: New England St. Lawrence Valley Geographical Society. Editor, with Timothy J. Rickard.
1991. "The Street Name Cover of New England." *Proceedings of the New England-St. Lawrence Valley Geographical Society*. 21: 1-12.
1997. "Uppie, Downie - Commercial Shad Fishing on the Hudson." *Shad Journal* 2 (5): 4-8.
- 1998 "Architecture and Landfill in the Back Bay." Field trip for the Association of American Geographers meeting, Boston.

1998. "Boston's North End: a Multi-Layered Landscape." Field trip for the Association of American Geographers meeting, Boston.
1997, 1998. *Atlas of Popular Culture in the Northeastern United States* [<http://www.geography.ccsu.edu/harmonj/atlas.htm>].
1999. "The Place Name Cover of New England." In *Boston and New England: Advancing the Revolution in Geographic Education in a Region of Change. A Pathways in Geography Resource Publication 21*. Editors Theodore S. Pikora and Steven S. Young. 21-30.
1999. "Locating, Mapping and Explaining Vernacular Region Names." In Pikora and Young. 89-98.
2003 *GIS Design and Implementation*. With Steven A. Anderson, John Wiley & Sons: New York.

Conference Presentations

1976. "A Time Series Analysis of Manufacturing Employment Decline in New England Cities." New England-St. Lawrence Valley Geographical Society.
1977. "An Accounting Model for Economic Transmission in an Urban System." Association of American Geographers.
1978. "Distribution of Short-Run Economic Change in a City System." Association of American Geographers
1979. "A Sequence Analysis of Store Associations in Covered Malls." Association of American Geographers
1983. "Suburban Areal Institutions and Urban Form." Association of American Geographers
1987. "The Information Reach of Megalopolitan Centers. New England-St. Lawrence Valley Geographical Society.
1990. "The Regional Structure of Newspaper Influence Fields in the United States Urban System. Association of American Geographers
1991. "The Spatial Structure of Newspaper Circulation Fields." Association of American Geographers
1992. "The Natural Environment in New England's Street Name Cover." Association of American Geographers.
1993. "A Rapid Development Methodology for Preparation of GIS Parcel Layers." Towson State University GIS Conference.
1996. "Vegetation in the Place Name Cover of the United States." Association of American Geographers..
1997. "Origins and Diffusion of Lacrosse in North America." New England-St. Lawrence Valley Geographical Society.
2001. "The Mixed Diffusion of Danball." Northeast Popular Culture/American Culture Association.
2005 "Reducing Chaos in Map Layers – Connecticut Plan of Conservation and Development 1998 and 2003. Towson (MD) GIS
2006 "Use of Valley in Vernacular Region Names in the Northeastern United States." Association of American Geographers Annual Convention.

PROFESSIONAL ACTIVITY

New England-St. Lawrence Valley Geographical Society - 1979 to 1998. State representative, Secretary-Treasurer, Vice-President, Editor Proceedings (several years), President (1996-1998), Conference Organizer - Hartford (1994).

Connecticut Arc-Users Group - Statewide association of users of a GIS software. Organized conferences for 200-400 people, 1997.

Local Arrangements Committee - AAG. Boston meeting, 1997

Member User2User Network (CT - GIS)

Expert Testimony

Camacho et al vs. Galvin (Massachusetts - 2003, 2004)

Black Political Task Force vs. Galvin (Massachusetts - 2003, 2004)

Black Political Task Force, et. All v. Galvin et al (Massachusetts 2003,2004)

Metts v. Murphy, C.A. No. 02-204T (D.R.I.). (Rhode Island - 2004)

CERTIFICATE OF SERVICE

I hereby certify that this document filed through the ECF system will be sent electronically to the registered participants as identified on the Notice of Electronic Filing (NEF) and paper copies will be sent to those indicated as non-registered participants on February 2, 2007.

/s/ Paul E. Nemser